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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,663	06/20/2006	Marina Rogunova	1200319N US	9021
35227	7590	10/09/2009		
POLYONE CORPORATION 33587 WALKER ROAD AVON LAKE, OH 44012				
EXAMINER				
MULLIS, JEFFREY C				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
10/09/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/596,663

Applicant(s)

ROGUNOVA ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laughner et al. (US 5,196,479) in view of Chung et al. (US 2005/0065263).

Patentees disclose a composition containing a polycarbonate, a polyester and “two or more” (column 11, lines 42-46) impact modifier including core shell impact modifiers with alkyl acrylate cores having up to 15 carbon atom alkyl moieties and MMA shells (abstract; column 15, lines 3-25) and in which the impact modifiers also include vulcanized EPDM as in applicants component “c”.

Laughner does not disclose any actual examples in which all of applicants claimed features are present and does not disclose addition of nanoclays.

Chung discloses addition of nanoclays to thermoplastic polycarbonate compositions to improve mechanical properties (paragraph 4Z).

It would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to add the nanoclays of the secondary reference to the primary reference in order to improve mechanical properties absent any showing of surprising or unexpected results.

It would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to arrive at applicants invention by selecting from the various disclosures of the primary reference in the expectation of adequate results absent any showing of surprising or unexpected results.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacroix et al. (US 7022768) in view of Cartasegna (US 4,883,840) and further in view of Chung et al. (US 2005/0065263), cited above and relied upon for claim 9.

Patentees disclose a composition containing PBT and a core shell polymer (abstract) as well as polycarbonate (patent claim 13. Blends of polyolefin and EPDM may be added at column 7, lines 15-18.

Cartasegna (US 4,883,840) at column 6, lines 15-29 discloses that dynamic curing or rubber increases impact performance. Hence it would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to dynamically cure the EPDM of the primary reference as taught be the secondary reference in order to improve impact performance absent any showing of surprising or unexpected results. It would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to add the nanoclays of the secondary reference to the primary reference in order to improve mechanical properties absent any showing of surprising or unexpected results.

Applicant's arguments filed 6-16-09 have been fully considered but they are not persuasive. It is true that Laughner requires the presence of PPE. Firstly however, the term "consisting essentially of" in applicants claims applies to the "thermoplastic

polymers to be impact modified". Laughner however implies that the impact modifier is for the polyester components and polycarbonate components at the paragraph bridging columns 1 and 2 and as such even if the phrase "consisting essentially of" in line 2 of claim 1 was changed to recite "consisting of", PPE would not be excluded since applicants composition as a whole is recited to be "comprising" in claim 1. Secondly, the term "consisting essentially of" only excludes those materials which materially affect the novel and basic characteristics of a composition and it is applicants' burden to prove that such characteristics are changed by the presence of additional materials recited in a prior art product. Note In re Janakirama-Rao, 317 F. 2d 951, 137 USPQ 893 (CCPA 1963) and In re De Lajarte, 337 F. 2d 870, 143 USPQ 256 (CCPA 1964) in this regard. It is noted in fact that Laughner teaches as little as "about" 1% PPE and therefore even if the term "consisting essentially of" applied to any thermoplastic polymer it would be applicants burden to prove that as little as "about" 1% PPE affected the novel and basic characteristics of applicants invention.

Applicants argue that Lacroix requires the use of three different types of impact modifiers. While this is true applicants own published specification at paragraph 37 discloses that applicants three impact modifiers may be blended together and therefore it can hardly be said that the novel and basic characteristics of applicants invention are changed by the use of multiple impact modifiers. It is not the position of the examiner that those skilled in the art would be motivated to add an impact modifier without ethylene homopolymer (for instance HDPE) or ethylene copolymer to the composition of Lacroix based on the teachings of Cartasegna. However at present there is no proof

that the instant claims exclude ethylene homo or copolymers and hence it is immaterial that Carasegna only suggests addition of an impact modifier containing HDPE or ethylene copolymer to the composition of Lacroix.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis M-F, 9-5pm at telephone number 571 272 1075.

Jeffrey C. Mullis
Primary Examiner
Art Unit 1796

JCM

10-6-09

/Jeffrey C. Mullis/

Primary Examiner, Art Unit 1796